2006 7th SRFB Round Project Descriptions for Final Applications Hood Canal Coordinating Council Lead Entity

A. Little Quilcene River Acquisition

Western Washington's Puget Sound and Hood Canal are comprised of large, complex estuarine systems that support tremendous biological productivity and diversity. This area is home to at least 7,000 species of invertebrates, 200 species of fish, 100 species of sea birds, and 26 species of marine mammals (Seattle District USACE 2004; PSAT 2005). Although these marine areas still support the largest remaining estuarine wetlands on the west coast, 73 percent of its salt marsh habitat has been lost since the 1800's (PSAT 2004).

The Little Quilcene River along with the Big Quilcene River estuary represents some of the most significant estuarine/saltmarsh areas in this marine complex and has been impacted by the construction of a dike system nearly 100 years ago. The estuary supports sustaining populations of chinook, pink, chum, steelhead, coho, sturgeon, and cutthroat, yet dikes have disturbed tidal function on a significant portion of this estuary (LFA, 2003). The diking limits the amount of mesohaline habitat available to salmon fry, and this disturbance of the natural flow regime reduces juvenile chum access to the marshes and inhibits prey production (Ames et al. 2000).

We intend to acquire two buildable, adjacent parcels (8+ acres and 2,000' riverfront) to one that was purchased through the SRFB by Jefferson County which unifies the North side of the Little Quilcene River and estuary from the Center Road Bridge to the Quilcene Bay. This will lead to further breaching of the north Little Quilcene River Dike.

B. Quilcene Watershed Acquisition and Assessment

This project secures a Big Quilcene River "reach -wide biological assessment", that will support a multi-agency programmatic agreement for restoration activities from the federal Quilcene Fish Hatchery to the river mouth. This project also supports property acquisition in the Quilcene watershed identified as critical for conservancy purposes. The Skokomish Tribe has worked cooperatively to improve habitat in this watershed, an area within the Treaty-defined usual and accustomed area of the Tribe. SRFB funded a 2004 "Quilcene River Reach Analysis and Restoration Feasibility Study" prepared by Herrera Consultants. The analysis determined the "study reach" had incised, disconnecting it from the floodplain. Recommended restoration included construction of a series of engineered grade controls, jam complexes and bank protection jams in the "restoration reach" in a phased fashion, improve on-site channel conditions, and begin the process of coarse sediment retention and floodplain integrity. The Tribe installed pilot log structures in 2002 and 2003, including a grade control and a bar structure intended to divert high flows towards a relict side channel on the north bank, and acquired 15 acres of floodplain, an area utilized by Hood Canal summer chum salmon. The Tribe has since purchased an adjacent 15 acres. The Tribe was awarded 2005 SRFB funds to implement elements identified in the study. This project is the logical step forward in a longer reach- wide assessment.

C. Quilcene Estuarine Wetlands Restoration

Quilcene Bay, Washington and its associated coastal wetlands provide significant habitats for a wide diversity of wildlife and fish populations including marine mammals. seabirds, migratory shorebirds, migratory and breeding waterfowl, neotropical birds, raptors, salmon, clams and Dungeness crab. Much of Quilcene Bay's estuarine wetlands have been lost by the impacts of agricultural diking, road building, and flood control projects. The Quilcene Estuarine Wetlands Restoration and Protection Project will return 38 acres of coastal wetland habitats to properly functioning conditions for the benefit of numerous healthy and imperiled fish and wildlife species. The project is identified in the Hood Canal/Water Resources Inventory Area (WRIA) 17 Limiting Factors Analysis (Washington State Conservation Commission 2002) as a Tier 1 (most important habitat), Priority 1 (most important project) project for the recovery of several Hood Canal salmonid species listed as "threatened" under the Endangered Species Act. Work will be accomplished by 1) permanently removing livestock from the 38 acre restoration site, 2) completely removing 3,000 feet of saltwater levee, 3) reestablishing a properly functioning tidal channel network, and 4) reestablishing appropriate plant communities upon adjacent emergent wetlands. The restored estuarine wetlands (38 acres) and an adjacent 12 acres of estuarine wetlands (50 acres total) will be conserved in perpetuity using a conservation easement.

C. Dosewallips Floodplain Acquisition Phase 2

The Dosewallips River contains some of the most important and highest quality salmon habitat in eastern Jefferson County as identified by the Eastern Jefferson County Refugia Study and the HCCC Salmon Recovery Strategy. The Dosewallips Floodplain Acquisition Project - Phase II will permanently protect critical in-stream habitat, floodplain, sandbars, side channels, and floodplain connections that support spawning populations of threatened Puget Sound Chinook salmon and Hood Canal summer chum in the Dosewallips River. The high quality habitat present in this river reach is also used by steelhead, Coho salmon, pink salmon, and cutthroat trout. Our proposal to acquire over 33 acres will protect a channel migration zone with the highest spawning use by Puget Sound Chinook salmon in some years. This project will prevent future habitat degradation along more than one-half mile of shoreline.

This project builds on Jefferson County's successful SRFB 2004 application (the original Dosewallips Floodplain Acquisition Project) that resulted in the acquisition of 74 acres of complex riparian and floodplain habitat. Phase II increases the protected acreage in this important "Powerlines Reach" reach by more than 30%. Phase II will also incorporate restoration activities that reduce high risk threats to water quality.

D. Dosewallips Estuary Restoration – Wolcott

Under this proposal, the Hood Canal Salmon Enhancement Group will remove an existing storage and hatchery facilities including concrete slabs, remove ~600 cu yards of fill and debris, remove 80n cu yards of concrete raceways and restore the native vegetation. This work continues a highly successful partnership between the HCSEG, Hood Canal Coordinating Council (HCCC), Port Gamble S'Klallam Tribe (PGST), Washington Department of Fish and Wildlife (WDFW), the USFWS and Brinnon-area residents.

E. Hama Hama Estuary Restoration

The Hama Hama River was diked in the early 1900's cutting off normal flow to the North Fork and channelizing the South Fork essentially cutting of the estuary function to Hood Canal. Adult Chinook, Coho, Fall Chum, Pink, Steelhead, Cutthroat Trout and Summer Chum are all easy prey for marine mammals as they return to their spawning beds due to the channelization of the South Fork, in essence creating a gauntlet for adult salmonids to navigate. The migratory escape route for juveniles is no less peril less as scores of shore birds pick them off as they try to access the marine waters of Hood Canal.

This project will establish ~600 of anchored LWD on the South side of the River and create two openings on the North dike to allow both adult and juvenile passage into and from 45 acres of estuarine saltmarsh where access has been diverted.

The HSCEG will also improve access to an additional 2.5 acres of saltmarsh on the South side for migrating juvenile salmonid access by removing an antiquated culvert and increasing the channel into the saltmarsh.

F. South Fork Skokomish LWD Enhancement

This project proposed by the Skokomish Tribe is to design/install log jam structures to enhance the density and distribution of natural large woody debris in the upper South Fork Skokomish River and tributary confluence's primarily with the use of helicopters. Heavy equipment and hand tools may also be used in certain areas.

The SF Skokomish River is located in Mason County and the Skokomish/Dosewallips WRIA 16 (Watershed Resource Inventory Area). It drains an area of approximately 129 square miles (includes Vance Creek) with coniferous forests being the primary land cover. The majority of the SF Skokomish River is located within the Olympic National Forest with about 14% of the lower basin owned by the Green Diamond Resource Company (formerly Simpson Timber Co.). Tacoma Power owns a critical parcel in the proposed restoration reach. A small portion of the headwaters are located in the Olympic National Park. The lower 3 miles are located in the Skokomish Valley and are dominated by residential development and agriculture.

Reaches targeted for wood include an area between the canyon and LeBar Creek that was cleared for a proposed dam/reservoir in the 1950's-70's but never built. Riparian forests and uplands in this reach and throughout the basin have been heavily roaded/logged and have reduced wood supplies. Other potential locations for wood additions are at tributary mouths (Church, Pine, and Cedar) where the Forest Service has noted connectivity and low flow concerns.

G. Richert Ranch Acquisition Phase 2

Project partners are requesting additional funds to secure and expand protection of critical salmon habitat near the confluence of the North and South Fork of the Skokomish River and Richert Springs. The project area is widely regarded as the most important and urgent salmon restoration project within the Hood Canal Basin. It is important for ESA-listed chinook salmon, summer chum salmon, and bull trout, as well as coho, fall chum and steelhead. Due to the failure of an agricultural dike, the North Fork is now

flowing through a cattle pasture creating significant sediment, water quality, temperature and fish passage concerns. Once the parcels are purchased, restoration will occur allowing for creation of significant off-channel and floodplain habitat beneficial for all salmonid species as well as for flood retention.

Phase I secured funding for purchase of a 150 acre easement and project partners are requesting additional funds for fee simple acquisition of the project area. Phase II significantly increases the scope of the project to include potential fee simple acquisition of additional important riparian habitat along the North Fork of the Skokomish and Richert Springs. This will allow for timely restoration while eliminating incompatible land uses within the floodplain. CLC is continuing negotiations with the landowners and have explored several options concerning purchase of conservation easements and/or fee simple purchase of the project area.

H. Union River Estuary Acquisition

Western Washington's Puget Sound and Hood Canal are comprised of large, complex estuarine systems that support tremendous biological productivity and diversity. This area is home to at least 7,000 species of invertebrates, 200 species of fish, 100 species of sea birds, and 26 species of marine mammals (Seattle District USACE 2004; PSAT 2005). Although these marine areas still support the largest remaining estuarine wetlands on the west coast, 73 percent of its salt marsh habitat has been lost since the 1800's (PSAT 2004).

The Union River estuary represents one of the significant estuarine/saltmarsh areas in this marine complex and has been impacted by the construction of a dike system nearly 100 years ago. The estuary supports sustaining populations of chinook, chum, coho, sturgeon, and cutthroat, yet dikes have disturbed tidal function on about 23% of this 345 acre estuarine delta (LFA, 2003). The diking limits the amount of mesohaline habitat available to salmon fry, and this disturbance of the natural flow regime reduces juvenile chum access to the marshes and inhibits prey production (Ames et al. 2000).

Land use changes have been documented (LFA, 2003) and the Union River is identified as a Tier 1 priority watershed (S H R S, 2004) for habitat restoration.

We intend to acquire 45 acres of diked farmland which will lead to the restoration of 40 acres of estuarine/saltmarsh complex and will lead to the breaching of an extensive 3500' dike system.